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09/955,436	: 09/10/2001	David Cheriton	CSCO-102828	9447

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EXAMINER

DERWICH, KRISTIN M

ART UNIT PAPER NUMBER

2132

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/955,436	Applicant(s) CHERITON ET AL.	
	Examiner Kristin Derwich	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11 and 15-20 is/are rejected.
- 7) ☐ Claim(s) 6, 12-15 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending.

Claim Objections

2. Claims 6 and 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 12-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10, 12-16 and 19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. The term "adequate" in claims 10 and 19 is a relative term which renders the claim indefinite. The term "adequate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Without further

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explanation, one of ordinary skill in the art would not know the type of protection needed for the digital content in order to be verified.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Hereafter patent literature that is referenced as prior art will be cited by column and line number in the form of (column number:line number range). For example, the citation (6:23-27) refers to lines 23-27 of the 6th column in the reference.

6. Claims 1, 2, 4, 5, 7-11 and 16-19 rejected under 35 U.S.C. 102(e) as being anticipated by Marconcini et al. (Marconcini), U.S. Patent No. 6,834,110.

As per claim 1:

Marconcini discloses an end user device usable as a secure digital appliance comprising:

a network interface for receiving communications coupled over a communication network (72:60-64; 83:28-32; 88:17);

provision for private key storage, said provision for private key storage operable to securely store a private key of a private key and public key pair (84:41-43);

a decryption module coupled to said network interface and coupled to said provision for private key storage (88:4-9), said decryption module operable upon receiving a message that is encrypted using said public key to decrypt said message (18:59-60) using said private key for obtaining a first secret key (19:22-24, where the symmetric key functions as the first secret key), said decryption Module also operable to decrypt encrypted digital content that is received at said network interlace using said first secret key so as to obtain digital content (19:25-26);

a local output device coupled to said decryption module (14:26-33, where the output device can be any of a PCS, set-top box, etc.), said local output device operable to provide protected output of said digital content (10:36-43; 23:46-55, where scrambling the digital content functions as protection for the output), said secure digital appliance not allowing for any output of said digital content other than said protected output (23:61-65; 24:28-33).

As per claim 2:

Marconcini discloses a decode module coupled to said decryption module and operable to the secure digital appliance (88:8-9, where the Decompression component is usable as a decode module) further comprising:

decode said digital content when said digital content is encoded (91:25-26);

and a local output interface coupled to said decode module and coupled to said local output device for output of said decoded digital content (87:56-57).

As per claim 4:

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Marconcini discloses a secure digital appliance wherein said protected output provides for exhibition of said digital content (83:13-16, wherein playing back the digital content constitutes exhibition).

As per claim 5:

Marconcini discloses a secure digital appliance wherein said secure digital appliance does not contain any provision for output other than said exhibition of said digital content (14:26-30, wherein the device can only output the digital content through an End-User Player Application).

As per claim 7:

Marconcini discloses a secure digital appliance wherein, upon receiving a message that includes one or more time stamp, said secure digital appliance is operable to only exhibit said digital content during the time indicated by said one or more time stamp (81:13-22, wherein the time-out functions as the time stamp).

As per claim 8:

Marconcini discloses a method for protecting digital content comprising:
upon receiving a request for digital content that identifies a secure digital appliance that contains a private key of a private key and public key pair, determining said public key (21:16-18; 21:28-29; 70:53-57; 21:31-32; 21:44-46; 21:56-58);

In this instance, the Clearinghouse receives an Order SC and the order SC contains the request for digital content from the end user, along with the information identifying the end user device. The private key that is contained with this pair is the Clearinghouses and the public key is that of the end user.

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sending a first digital message to said secure digital appliance, said first digital message encrypted with said public key and said first digital message including a first secret key (18:28-30);

The first digital message is the symmetric key which functions as the secret key in this instance being sent to the end user device which is usable as a secure digital appliance.

decrypting said first digital message at said secure digital appliance using said private key so as to obtain said first secret key (19:22-24, wherein the first secret key is the symmetric key);

decrypting encrypted digital content at said secure digital appliance using said first secret key so as to obtain said digital content (19:25-26); and

providing for protected output of said digital content at said secure digital appliance, said secure digital appliance not allowing for any output of said digital content other than said protected output (20:17-22; 23:20-23).

The watermarking tool is used to apply a watermark to the output which makes the output protected and the Content Usage Control layer ensures the content is only used in the predetermined manner.

As per claim 9:

Marconcini discloses a method for protecting digital content comprising:

decoding said encrypted digital content when said digital content requires decoding (91:25-26).

As per claim 10:

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Marconcini discloses a method for protecting digital content further comprising:
verifying that said secure digital appliance will provide adequate protection of
said digital content (23:51-55; 24:42-50); and

not sending said first digital message and said digital content when said secure
digital appliance is determined not to provide adequate protection of said digital content
(13:62-64).

In this instance, the key functions as the first digital message which is not sent if
the end user device is not verifiable.

As per claim 11:

Marconcini discloses a method for protecting digital content wherein said
protected output provides for exhibition of said digital content (92:61-62) and wherein
said secure digital appliance does not contain any provision for output other than said
exhibition of said digital content (14:26-30, wherein the device can only output the digital
content through an End-User Player Application).

As per claim 16:

Marconcini discloses a method for protecting digital content comprising the step
of:

when said first digital message includes one or more time stamp, only allowing
the exhibition of said digital content during the time indicated by said one or more time
stamp (81:13-22, wherein the time-out functions as the time stamp).

As per claim 17:

Marconcini discloses a method for assuring protection of digital content comprising the steps of:

upon receiving a request for digital content that identifies a secure digital appliance that contains a private key of a private key and public key pair, and that identifies a set-top box that contains a private key of a private key and public key pair (95:3-5, wherein, the broadcast center identifies a set top box based on the set top box making the request), determining said public key for said secure digital appliance and determining said public key for said set-top box (21:16-18; 21:28-29; 70:53-57; 21:31-32; 21:44-46; 21:56-58);

The method Marconcini teaches as applied to claim 8 above, pertains to a plurality of end user devices, one of which is a set top box (14:31), wherein the end user device is the set top box, hence the secure digital appliance. Marconcini also teaches another embodiment wherein the method is applied to a television display and a set top box (80:52-54), wherein the television display is the secure digital appliance.

sending a first digital message that is encrypted with said public key for said set-top box to said set-top box, said first digital message including a first secret key (18:28-30),

In this instance, the end user device is a set top box.

sending a second digital message that is encrypted with said public key for said secure digital appliance to said secure digital appliance, said second digital message including said first secret key (18:28-30),

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The same method would be used to send a message and keys to the secure digital appliance as that to the set top box. The secret key would be the same since it is linked to the digital content through the watermark (23:61-65) and the digital content is being sent to both the set top box and the secure digital appliance.

decrypting said first digital message at said set-top box using said private key for said set-top box so as to obtain said first secret key (19:22-24);

decrypting digital content that is encrypted using said first secret key at said set-top box so as to obtain decrypted digital content (19:25-26);

decoding said decrypted digital content at said set-top box so as to obtain decoded digital content (91:25-26);

encrypting said decoded digital content at said set-top box using said secret key and sending said encrypted decoded digital content to said secure digital appliance (86:36-45, wherein the secret key is the Secret User Key; 95:41-43, wherein the end user device is the digital appliance receiving the broadcast SC's which contain the encrypted digital content from the set top box);

decrypting said first digital message at said secure digital appliance using said private key for said secure digital appliance so as to obtain said first secret key (19:22-24);

decrypting said encrypted decoded digital content at said secure digital appliance using said first secret key so as to obtain said digital content (19:25-26); and

providing for protected output of said digital content at said secure digital appliance, said secure digital appliance not allowing for any output of said digital content other than said protected output (20:17-22; 23:20-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Davis, U.S. 5,825,879.

Marconcini fails to teach the secure digital appliance including an integrated circuit device that includes a provision for private key storage, a decryption module and a decode module. However, Davis discloses a Secure Video Content Processor wherein the processor is itself an integrated circuit, encased and secured inside an integrated circuit package (4:42-47). The processor includes circuitry units for decryption and decompression (4:59-61), along with storage for keys (5:31-33, 36-38).

It would have been obvious to one of ordinary skill in the art at the time of applicants invention to include an integrated circuit device with the secure digital appliance because this would allow for more flexibility and a much larger pool of possible secure digital appliances for the method of Marconcini to be applied to.

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Especially since Marconini discloses that the method can be utilized in both software and hardware applications (Marconini, 14:32-33).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin Derwich whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KD
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Kristin Derwich
Examiner
Art Unit 2132



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